WHAT IS CLAIMED IS:

~~1. A mobile telephone communications system having a multi-level distributed~~ architecture, said system comprising:

a plurality of base station transceiver subsystems (BTSs) arranged across a plurality of cells, each base station transceiver subsystem (BTS) having a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call;

at least one first level PSEL means for implementing a first level power control and frame selection of compressed packet data in conjunction with the telephone call, each said first level PSEL being coupled to and positioned proximate a prescribed plurality of base station transceiver subsystems;

second level PSEL means for implementing a second level power control and frame selection of compressed packet data in conjunction with the telephone call, said second level PSEL coupled to said at least one first level PSEL;

router coupled to said second level PSEL for routing compressed packet data in conjunction with the telephone call to and from said at least one first level PSEL through said second level PSEL; and

at least one CSEL means for implementing call processing and call management in conjunction with the telephone call, said at least one CSEL coupled between said router and a prescribed mobile switching center (MSC) and further being positioned proximate the MSC, wherein said router is further for routing compressed packet data to and from said at least one CSEL.

2. The system of claim 1, wherein

said at least one first level PSEL includes a plurality of first level PSELs for implementing a first level power control and frame selection, ~~the plurality of first level~~

PSELs being coupled to and positioned proximate a respective prescribed plurality of base station transceiver subsystems, further wherein

said second level PSEL operates in either of two modes, i) a first mode including a pass-through mode wherein frame selection is performed by a first level PSEL and ii) a second mode, wherein a particular movement of the subscriber unit gives rise to the occurrence of a soft handoff between BTSs of different first level PSELs and said second level PSEL operates to handles the soft handoff while placing respective first level PSELs in a pass-through mode.

3. The system of claim 1, further wherein said router is coupled to said CSEL via at least one of the following selected from the group consisting of T1 link, E1 link, satellite link, fiber optic link, a public network, a router, and a mobile switching center.

4. The system of claim 1, wherein said CSEL is coupled to the MSC via a plurality of digital signal processors (DSPs), wherein a prescribed selected frame, as selected by one of said at least one first level PSEL and said second level PSEL, includes compressed packet data and is transmitted from a respective PSEL, via said router, and to said CSEL, further wherein a prescribed digital signal processor DSP of the plurality of DSPs decompresses the packet data of the selected frame.

5. The system of claim 1, wherein said second level PSEL is coupled to said router via a T1 link.

6. The system of claim 1, wherein said second level PSEL is coupled to said router via an E1 link.

7. The system of claim 1, wherein said second level PSEL is coupled to said router via a satellite link.

8. The system of claim 1, wherein said second level PSEL is coupled to said router via a fiber optic link.

wherein said router routes compressed packet data to and from the at least one first level PSEL through said second level PSEL.

11. The system of claim 9, wherein said PSEL is coupled to said router via a T1 link.

12. The system of claim 9, wherein said PSEL is coupled to said router via an E1 link.

13. The system of claim 9, wherein said PSEL is coupled to said router via a satellite link.

14. The system of claim 9, wherein said PSEL is coupled to said router via a fiber optic link.

15. The system of claim 9, further wherein said router is coupled to said CSEL via at least one of the following selected from the group consisting of T1 line, E1 line, satellite link, fiber optic link, a public network, router, and switch.

16. The system of claim 9, wherein said CSEL is coupled to the MSC via a plurality of digital signal processors (DSPs), wherein a prescribed selected frame as selected by said PSEL includes compressed packet data and is transmitted from said PSEL, via said router, and to said CSEL, further wherein a prescribed digital signal processor DSP of the plurality of DSPs decompresses the packet data of the selected frame.

PSELs being coupled to and positioned proximate a respective prescribed plurality of base station transceiver subsystems, further wherein

the second level PSEL operates in either of two modes, i) a first mode including a pass-through mode wherein frame selection is performed by a first level PSEL and ii) a second mode, wherein a particular movement of the subscriber unit gives rise to the occurrence of a soft handoff between BTSs of different first level PSELs and the second level PSEL operates to handles the soft handoff while placing respective first level PSELs in a pass-through mode.

19. The method of claim 17, further wherein the router is coupled to the CSEL via at least one of the following selected from the group consisting of T1 link, E1 link, satellite link, fiber optic link, a public network, a router, and a mobile switching center.

20. The method of claim 17, wherein the CSEL is coupled to the MSC via a plurality of digital signal processors (DSPs), wherein a prescribed selected frame, as selected by one of the at least one first level PSEL and the second level PSEL, includes compressed packet data and is transmitted from a respective PSEL, via the router, and to the CSEL, further wherein a prescribed digital signal processor DSP of the plurality of DSPs decompresses the packet data of the selected frame.

21. The method of claim 17, wherein the second level PSEL is coupled to the router via one of the following selected from the group consisting of a T1 link, E1 link, satellite link, and optic fiber link.

~~wherein the router routes compressed packet data to and from the at least one first level PSEL through the second level PSEL.~~

24. The method of claim 22, wherein the second level PSEL is coupled to the router via one of the following selected from the group consisting of a T1 link, E1 link, satellite link, and optic fiber link.

25. The method of claim 22, further wherein the router is coupled to the CSEL via at least one of the following selected from the group consisting of T1 line, E1 line, satellite link, fiber optic link, a public network, router, and switch.

26. The method of claim 22, wherein the CSEL is coupled to the MSC via a plurality of digital signal processors (DSPs), wherein a prescribed selected frame as selected by the PSEL includes compressed packet data and is transmitted from the PSEL, via the router, and to the CSEL, further wherein a prescribed digital signal processor DSP of the plurality of DSPs decompresses the packet data of the selected frame.

9. A mobile communications system having a multi-level distributed architecture, said system comprising:

a plurality of base station transceiver subsystems (BTSs) arranged in cells, each base station transceiver subsystem (BTS) having a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call;

PSEL means for implementing a power control and frame selection of compressed packet data in conjunction with the telephone call, said PSEL coupled to and being positioned proximate said plurality of base station transceiver subsystems;

router coupled to said PSEL for routing compressed packet data to and from said PSEL; and

CSEL means for implementing call processing and call management in conjunction with the telephone call, said CSEL coupled between said router and a prescribed mobile switching center (MSC) and further being positioned proximate the MSC, wherein said router is further for routing compressed packet data to and from said CSEL.

10. The system of claim 9, wherein said PSEL includes at least one first level PSEL for implementing a first level power control and frame selection, the at least one first level PSEL being coupled to and positioned proximate a respective prescribed plurality of base station transceiver subsystems, said system further comprising:

second level PSEL means for implementing a second level power control and frame selection in conjunction with the telephone call, said second level PSEL coupled to and positioned proximate the at least one first level PSEL, wherein upon a particular movement of the subscriber unit giving rise to the occurrence of a soft handoff between BTSs of different first level PSELs, said second level PSEL operates to handles the soft handoff and places the respective first level PSELs in a pass-through mode, further

17. A method for establishing a multi-level distributed architecture for a mobile telephone communications system, said method comprising the steps of:

providing a plurality of base station transceiver subsystems (BTSs) arranged across a plurality of cells, each base station transceiver subsystem (BTS) having a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call;

implementing a first level power control and frame selection of compressed packet data in conjunction with the telephone call with the use of at least one first level PSEL, each first level PSEL being coupled to and positioned proximate a prescribed plurality of base station transceiver subsystems;

implementing a second level power control and frame selection of compressed packet data in conjunction with the telephone call with the use of a second level PSEL, the second level PSEL coupled to the at least one first level PSEL;

routing compressed packet data in conjunction with the telephone call to and from the at least one first level PSEL through the second level PSEL with the use of a router coupled to the second level PSEL; and

implementing call processing and call management in conjunction with the telephone call with the use of at least one CSEL, the at least one CSEL coupled between the router and a prescribed mobile switching center (MSC) and further being positioned proximate the MSC, wherein the router is further for routing compressed packet data to and from the at least one CSEL.

18. The method of claim 17, wherein

the at least one first level PSEL includes a plurality of first level PSELs for implementing a first level power control and frame selection, the plurality of first level

22. A method of implementing a multi-level distributed architecture in a mobile communications system, said method comprising the steps of :

providing a plurality of base station transceiver subsystems (BTSs) arranged in cells, each base station transceiver subsystem (BTS) having a capability for establishing a radio frequency interface with a subscriber unit in conjunction with a telephone call;

implementing a power control and frame selection of compressed packet data in conjunction with the telephone call with the use of a PSEL, the PSEL coupled to and being positioned proximate the plurality of base station transceiver subsystems;

routing compressed packet data to and from the PSEL with the use of a router coupled to the PSEL; and

implementing call processing and call management in conjunction with the telephone call with the use of a CSEL, the CSEL coupled between the router and a prescribed mobile switching center (MSC) and further being positioned proximate the MSC, wherein the router is further for routing compressed packet data to and from the CSEL.

23. The method of claim 22, wherein the PSEL includes at least one first level PSEL for implementing a first level power control and frame selection, the at least one first level PSEL being coupled to and positioned proximate a respective prescribed plurality of base station transceiver subsystems, said method further comprising the step of:

implementing a second level power control and frame selection in conjunction with the telephone call with the use of a second level PSEL, the second level PSEL coupled to and positioned proximate the at least one first level PSEL, wherein upon a particular movement of the subscriber unit giving rise to the occurrence of a soft handoff between BTSs of different first level PSELs, the second level PSEL operates to handles the soft handoff and places the respective first level PSELs in a pass-through mode, further